

SPECIAL PAPERS ON GENERAL METEOROLOGY.

DISCUSSION IN THE MONTHLY WEATHER REVIEW OF THE RELATIONS OF FORESTS TO PRECIPITATION AND RUN-OFF OF WATER.

The following letter has been addressed to the Associated Bureaus of the Government and is also given to the public:

WASHINGTON, D. C., January 25, 1910.

DEAR SIR: Referring to the general topic of the relation of forests to precipitation, the consequent run-off and seepage, and effect upon stream flow, I beg to invite your attention to the importance of securing a thorough and conservative discussion of the numerous phases of this topic. A great deal is likely to be written on these subjects within the next year or two, and I beg to suggest that the MONTHLY WEATHER REVIEW would form a proper medium of public expression on the part of the Associated Bureaus of the Government interested in this line of work. Its pages will, therefore, be open to such carefully considered papers as you may choose to submit, expressing the views of your Bureau. It is desired that mere criticism should not enter into these papers, but the carefully prepared facts and the scientific deductions that arise from them will be welcome.

We may classify the subject approximately in the following way: (a) Meteorology is concerned with the great currents of circulation in the atmosphere which transport the aqueous vapor from the oceans to the continents; (b) Climatology is largely concerned with the effect of the mountains and topography, together with the forest and soil coverings upon the consequent precipitation, temperature, and general climatic effects; (c) Engineering naturally pays more attention to the subsequent transportation of the water, whether falling as rain or snow, from the higher elevations to the channels of flow, either over ground or under ground, until the water finally reaches the sea.

It is evident that these three subjects necessarily overlap one another, and that the data obtained by observers are susceptible to different interpretations from the point of view of the individual writer. The MONTHLY WEATHER REVIEW will be prepared to devote a proper part of its space to the discussion of the leading principles involved, as sustained by the facts obtained by suitable observations, and you are respectfully requested to advise your officials, and others who may be interested, of this proposal on the part of the U. S. Weather Bureau.

Very respectfully,

WILLIS L. MOORE,
Chief U. S. Weather Bureau.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Librarian.

The following have been selected from among the titles of books recently received, as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies. Most of them can be lent for a limited time to officials and employees who make application for them. Anonymous publications are indicated by a —.

Besançon. Observatoire nationale astronomique, chronométrique et météorologique.

22^{me} bulletin météorologique. Année 1906. 23^{me} bulletin météorologique. Année 1907. Besançon. 1909. v. p. 4°.

Brückelmann. —, ed.

Wir Luftschiffer. Die Entwicklung der modernen Luftschifftechnik. Berlin. 1909. 433 p. 8°.

Chatley, Herbert.

The force of the wind. London. 1909. viii, 83 p. 12°.

Davis, Gualterio, G.

Clima de la República Argentina. Buenos Aires. 1909. 111 p. 4°.

Gironde, France (dept.). Commission météorologique.

Bulletin . . . 1908. Bordeaux. 1909. 53 p. 8°.

Great Britain. Departmental committee on humidity and ventilation in cotton-weaving sheds.

Report . . . London. 1909. 22 p. f°.

Greenwich. Royal observatory.

Results of the magnetical and meteorological observations . . . 1907. Edinburgh. 1909. lix, (cxxxv) p. f°.

Hamberg, H. E.

. . . Nébulosité et soleil dans le péninsule Scandinave. Uppsala. 1909. 39 p. f°. (Appendice I aux observations météorologiques suédoises. v. 50. 1908.)

Hann, Julius.

Handbuch der Klimatologie. II. Band. Klimatographie. 1. Teil: Klima der Tropenzone. 3 Aufl. Stuttgart. 1910. xii, 426 p. 8°.

Holland. Koninklijk nederlandsch meteorologisch Instituut. Onweders, optische verschijnselen, Enz. in Nederland. 1907. Deel 28. Amsterdam. 1909. 119. 8°.

Horner, D. W.

Observing and forecasting the weather. Meteorology without instruments. 2d ed. London. 1909. 48 p. 12°.

Marriott, W.

Some facts about the weather. 2d ed. London. 1909. 27 p. 8°.

Mill, Hugh Robert.

The rainfall of Bedfordshire and Northamptonshire. [From the "Water supply of Bedfordshire and Northamptonshire." Mem. geological survey, 1908, pages 18 to 28.]

Prussia. K. preussisches aeronautisches Observatorium bei Lindenber.

Ergebnisse der Arbeiten . . . 1908. 4. Band. Braunschweig. 1909. xxix, 139 p. f°.

Pyrénées-Orientales. Commission météorologique départementale.

36^{me} bulletin météorologique annuel . . . 1907. Perpignan. [1909.] 52 p. 4°.

Scott, A. C.

Meteorology and weather forecasting. London. 1909. 40 p.

Sweden. Statens meteorologiska Centralanstalt.

Observations météorologiques suédoises . . . v. 50. 2:ième sér.: v. 36. Uppsala. 1909. x, 157 p. f°.

RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

C. FITZHUGH TALMAN, Librarian.

The subjoined titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers or other communications bearing on meteorology or cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled; it shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau. Unsigned articles are indicated by a —.

Aeronautics. New York. v. 6. February, 1910.

Custer, L. Luzern. A new principle in the construction of statoscopes. p. 40-42.

Engineering news. New York. v. 53. Jan. 20, 1910.

Mannakee, N. H. Barometric and temperature conditions at the time of dust-explosions in Appalachian coal mines. p. 58-61.

Geographical journal. London. v. 35. January, 1910.

Owen, Luella Agnes. Floods in the great interior valley of North America. p. 56-59.

— Terrestrial refraction at Alexandria. p. 79. [Abstract of paper by Xydis.]

— The rainfall of New Caledonia. p. 82. [Abstract of paper by Mialaret & Frayssé.]

London, Edinburgh, and Dublin philosophical magazine. 6 series. v. 19. January, 1910.

Gold, E[rnest]. The relation between periodic variations of pressure, temperature, and wind in the atmosphere. p. 26-49.

Nature. London. v. 82. January, 1910.

— New methods of weather forecasting. p. 271-272. [Review of work by Guilbert.]

Meyer, Kirstine. Ole Römer and the thermometer. p. 296-298.

Physical review. Lancaster. v. 30. January, 1910.

Oline, G. A. On the penetrating radiation at the surface of the earth. p. 35-52.